



FACILITY COMPLIANCE INSPECTION REPORT

Division of Waste Management Solid Waste Section

UNIT TYPE:											
Lined MSWLF	X	LCID		YW		Transfer		Compost		SLAS	COUNTY: Davidson PERMIT NO.: 29-06 FILE TYPE: COMPLIANCE
Closed MSWLF	X	HHW	X	White goods	X	Incineration		T&P		FIRM	
CDFL	X	Tire T&P / Collection	X	Tire Monofill		Industrial Landfill		DEMO		SDTF	

Date of Site Inspection: 08/23-24/11

Date of Last Inspection: 09/01-02/10

FACILITY NAME AND ADDRESS:

Davidson County Integrated Solid Waste Management
 1242 Old U.S Highway 29
 Thomasville, North Carolina 27360

GPS COORDINATES: N: 35.85281 E: 80.17620

FACILITY CONTACT NAME AND PHONE NUMBER:

Charles Brushwood, Solid Waste Director
 Office- 336-242-2284
 Cell- 336-240-0303
 e-mail- charlie.brushwood@davidsoncountync.gov

FACILITY CONTACT ADDRESS:

Same as above

PARTICIPANTS:

Angela Jones, Administrative Assistant
 Charlie Brushwood, Solid Waste Director
 Steven Sink, Landfill Supervisor
 Jim Gilreath, Landfill Safety Coordinator
 Elly Barton, Household Hazardous Waste Facility
 Lin Rimer, Scale House, County Tire Program
 Steve Swaim, Material Recovery Facility, Recycling Coordinator
 Sherri Robbins, Administrative Assistant
 Mark Pierce, Construction and Demolition Landfill
 Jamie Jarrell, Scale House Operator
 Hugh Jernigan, N.C. Solid Waste Section

PERMIT HISTORY/STATUS OF PERMIT:

Original Permit to Construct issued October 8, 1993: *(Phase 1, MSW Unit).*
 Original Permit to Operate issued September 28, 1994: *(MSW Unit, Phase 1, Area 3).*
 Permit Renewal issued August 21, 1995.
 Permit to Operate issued March 13, 1996: *(MSW Unit, Phase 1, Area 1).*
 Permit to Operate issued May 30, 2000: *(MSW Unit, Phase 1, Area 2, Cell 1).*
 Permit to Operate issued June 22, 2001: *(HHW Facility).*
 Permit to Operate issued November 20, 2001: *(C&D Landfill Unit, Phase 1).*

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Permit Modification issued May 15, 2002: *(Mobile Home Deconstruction for C&D Landfill and Alternative Daily Cover for MSW Landfill).*

Permit to Operate issued June 24, 2003: *(MSW Unit, Phase 1, Area 2, Cell 2).*

Permit to Operate issued April 10, 2006: *(C&D Landfill Unit, Phase 2).*

Permit to Construct issued September 28, 2007: *(MSW Landfill, Phase 2 Area 1).*

Permit to Operate issued December 8, 2008: *(Phase 2 Area 1), (Partial Closure Phase 1, Areas 1&3) (Closure Modification and Regrading Plan, Phase 1).*

Permit to Construct/Operate issued July 18, 2011: *(Permit to Construct C&D Landfill, Phase 4) (Permit Renewal to Operate MSW Phase 2, Area 1) (Permit Renewal to Operate C&D Landfill, Area 3)*

Permit Expiration Date July 18, 2016.

PURPOSE OF SITE VISIT:

Site visit to conduct a comprehensive facility audit.

STATUS OF PAST NOTED VIOLATIONS:

None

OBSERVED VIOLATIONS

None

The item(s) listed above were observed by Section staff and require action on behalf of the facility in order to come into or maintain compliance with the Statutes, Rules, and/or other regulatory requirements applicable to this facility. Be advised that pursuant to N.C.G.S. 130A-22, an administrative penalty of up to \$15,000 per day may be assessed for each violation of the Solid Waste Laws, Regulations, Conditions of a Permit, or Order under Article 9 of Chapter 130A of the N.C. General Statutes. Further, the facility and/or all responsible parties may be subject to enforcement actions including penalties, injunction from operation of a solid waste management facility or a solid waste collection service and any such further relief as may be necessary to achieve compliance with the North Carolina Solid Waste Management Act and Rules.

ADDITIONAL COMMENTS

General Information

1. The facility consists of a MSW Landfill (Phase 1, closed and Phase 2, active), Construction and Demolition Landfill, Household Hazardous Waste Collection Facility, Tire Collection Site, White Goods Collection and Processing Facility, a metals collection site, a waste drop-off convenience area for cars and small trucks, a swap shop area, household textiles recycling area, electronics recycling site, a drop-off convenience area for selected recyclables, and a Material Recovery Facility for collected recyclables.
2. The service area for the facility is Davidson County.
3. Required signage in place for all facility components.
4. Access roads for the facility are of all weather construction and maintained in good condition.
5. Operational records for the facility are maintained at the Davidson County Integrated Solid Waste office located at 1242 Old U.S Highway 29.
6. Reviewed current permit, operational plans, tonnage reports and other operational records for the facility and facility components.
7. The facility is covered under N.C. General Storm Water Permit No. NCG120038 issued in 2007 and expiring in 2012.
8. The facility is covered under approved Erosion and Sedimentation Control plan. The last plan approval was in April 2, 2007 for the Phase 2 MSW Landfill construction.
9. The facility has a pump and haul permit to the City of Lexington Waste Water Treatment Plant for leachate generated by the MSW Landfill operations.
10. Reviewed facility training records including SWANA certifications, waste screening training, and other related solid waste training.

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11. Current SWANA certifications for all facility areas of operation include, but not limited to: Jim Gilreath, Certified Landfill Manager-expires 06/10/14; Angela Jones, Landfill Operations Specialist-expires 03/27/13; Elly Barton, Landfill Operations Specialist-expires 10/01/13.; Sherri Robbins, Landfill Operations Specialist-expires 10/01/13, Jamie Jarrell, Landfill Operations Specialist-expires 10/01/13; Keith Cecil, Landfill Operations Specialist-expires 10/01/13; Mark Pierce, Landfill Operations Specialist-expires 10/01/13; Ken Biggs, Landfill Operations Specialist-expires 10/01/13; and Danny Cox, Landfill Operations Specialist-expires 03/01/14. Other landfill personnel have completed continuing education credit hours for renewal of certifications, but have not received certification certificates as of the date of this review.
12. Reviewed the approved Operations Plans (June 2011 revision) for the MSW landfills, HHW facility, and C&D landfill. Note: Suggest review of Operations Plan prior to next submittal of a permit renewal, amendment, or modification to make additions and clarifications.

Phase 1 Landfill Unit (Closed)

13. General MSW disposal for the Phase 1 Landfill was discontinued on December 16, 2008 after initial operations were commenced in the Phase 2. There was (~47,000 cubic yards) still available airspace remaining in the Phase 1 area.
14. The facility returned back into Phase 1 MSW Area September 22, 2009 to fill remaining air space, achieve permitted contours, and prepare crown for closure.
15. Completed Phase 1 disposal operations on November 18, 2009 for closure contours, establishing crown, and preparation for methane studies for a landfill gas extraction system.
16. November 18, 2009 should be considered "last receipt of waste" in Phase 1 for the purpose of MSW landfill closure activities.
17. The MSW Phase 1, Area 3 and parts of Area 1 have previously undergone closure and approval by the Solid Waste Section.
18. The closed Phase 1, Areas 3 and 1 were found to be stable and have good vegetative cover. Mowing of vegetative cover is being scheduled by the facility.
19. Closure operations have been completed for the remainder of the Phase 1 landfill and closure certification documentation has been submitted to the Solid Waste Section for review. Recent repairs for erosion were conducted under warranty by the closure contractor on parts the north facing side slopes in the recently closed Areas 1 and 2. Periphery ditches have been cleaned and no erosion areas were observed on the Phase 1 landfill.
20. Sedimentation basins well maintained and have adequate retention capacity.
21. Edge of waste markers are in place on Phase 1, several replacement markers are to be reinstalled in area of recent repairs.
22. The landfill gas extraction system has been installed on Phase 1. Landfill gas is being utilized to generate electricity and the Davidson Gas Producers, Landfill Gas to Energy Plant began full operations in November 2010.
23. Reviewed the methane monitoring program and quarterly methane monitoring sampling results for Phase 1. The last monitoring event on June 22, 2011 detected no methane in facility structures and monitoring points. The methane monitoring report included manufacturer's calibration data and field calibration data.
24. Reviewed most recent semiannual surface water/ground water/leachate monitoring event report conducted on March 15-16, 2011. The analysis of groundwater samples collected during the March sampling event reported two inorganic constituents, iron and vanadium, in excess of 2L groundwater standards. Elevated levels of iron and vanadium were also observed in the facility background monitoring well, indicating these constituents are naturally occurring. There were no detectable levels of organic constituents in any monitoring well samples.
25. Monitoring wells are accessible and locked.
26. Reviewed leachate program and records.
27. A leachate system inspection/cleaning/flushing was conducted by JetClean in November 2010.

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- 28. The collected leachate is pumped and hauled to the City of Lexington Waste Water Treatment Plant.
- 29. Records indicated no leachate was hauled during June and July 2011.
- 30. The leachate lagoon was observed to adequate additional storage capacity. Leachate from the Phase 1 lagoon was pumped and hauled to the waste water treatment plant on 8/24/11 to a minimum pond level in anticipation of a potential heavy rain event expected during the upcoming weekend.

Phase 2 MSW Landfill Unit

- 31. Disposal operations began December 10, 2008 in the Phase 2, Cell 1 area.
- 32. Reviewed the methane monitoring program and quarterly methane monitoring sampling results for Phase 2. The last monitoring event on June 22, 2011 detected no methane in facility structures and monitoring points. The methane monitoring report included manufacturer's calibration data and field calibration data. Methane monitoring locations were documented as installed on the Phase 2 area August 2008.
- 33. Reviewed asbestos disposal program. No recent disposal of regulated asbestos has been conducted. The last disposal of regulated asbestos occurred April 30, 2009 (51 bags, 1.71 tons). The disposal location for asbestos in the MSW landfill is logged and maintained.
- 34. The MSW landfill permit to operate contains a condition to allow for disposal of Waste Water Treatment Plant sludge, and a leachate recirculation plan. These activities are not being conducted at this time.
- 35. Reviewed daily cover verification logs (Conditions of July 15, 2009 Compliance Order/November 6, 2009 Consent Agreement). Note: Conducting daily cover verification and maintaining logs for the MSW landfill should be included in the facility Operations Plan).
- 36. Reviewed landfill staff training plan and landfill staff training logs (Condition of July 15, 2009 Compliance Order/November 6, 2009 Consent Agreement) as included in Appendix G of the approved Operations Plan (June 2011 revision).
- 37. Reviewed leachate release prevention plan (Condition of July 15, 2009 Compliance Order/November 6, 2009 Consent Agreement as included in Appendix F of the approved Operations Plan (June 2011 revision). Reviewed weekly leachate system inspection logs and quarterly/annual training logs.
- 38. Reviewed semiannual surface water/ground water/leachate monitoring program and most recent semiannual monitoring event report conducted on March 16-17, 2011. The analysis of groundwater samples collected during the March sampling event reported two inorganic constituents cadmium and vanadium, in excess of 2L groundwater standards. A statistical analysis of the exceedances was conducted as part of the monitoring report.
- 39. The MSW Landfill is currently receiving approximately 300-350 tons per day; the MSW Landfill received 9,591.98 tons for the month of July 2011.
- 40. Phase 2 leachate is collected and stored in a 330,000 gallon storage tank (550,000 secondary containment area) and is hauled to the City of Lexington Waste Water Treatment Plant. At the time of the facility audit the leachate storage tank was registering 8.5 feet of leachate. Approved Operations Plan states typical volume of leachate shall be maintained at 20.0 feet or less.
- 41. A leachate system inspection/cleaning/flushing was conducted by JetClean in November 2010.
- 42. The Phase 2 area hauled no leachate to the waste water treatment plant during the month of June 2011 and 16,200 gallons of leachate during the month of July 2011.
- 43. Reviewed random inspection program and reviewed waste screening reports. There have been 15 random inspections conducted during the period 06/01/11- 08/10/11. Section 2.4.1 of the Operations Plan states a minimum of 1% or one per week of incoming loads are to be inspected. The number random inspections exceed 1% of incoming loads for the period.
- 44. Edge of waste markers are in place on the Phase 2 MSW landfill (as contract specification for construction).
- 45. Observed operations at the Phase 2 MSW landfill.
- 46. Currently operating in Area 1, Cell 5.
- 47. Adequate daily soil cover observed over previous daily disposal operations, no areas of exposed waste.
- 48. The working face was compact and well defined, the tipping deck area was well maintained and free of debris for effective ingress and egress of disposal vehicles.

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- 49. Adequate compaction of incoming waste from daily operations.
- 50. Adequate intermediate soil cover over previous waste disposal areas.
- 51. Seeding has been conducted over intermediate soil cover areas.
- 52. Windblown materials observed to be effectively controlled and collected. The facility has constructed portable fences to be utilized as needed.
- 53. Monitoring wells accessible and locked.
- 54. The MSW Landfill is approved for the use of tarps as an alternative daily cover.
- 55. No on-site or off-site erosion noted. Sedimentation basins maintained and have adequate retention capacity.

C&D Landfill

- 56. Observed operations at the C&D landfill.
- 57. The C&D landfill facility began receiving waste on December 4, 2001.
- 58. Deconstruction of mobile homes is approved by 05/15/02 Permit modification at the C&D landfill. No mobile home deconstructions have been conducted in recent months.
- 59. The recent permit issuance of July 18, 2011 includes a Permit to Construct for the Phase 4 area and operation of the Phase 3 area (vertical expansion).
- 60. Construction for Phase 4 is anticipated by Fall 2011. Note: The Permit to Construct includes a condition for a preconstruction meeting to be held prior to construction (initial grading and soil moving activities).
- 61. Currently operating in the Phase 2 area.
- 62. The working face was well controlled and compacted.
- 63. Weekly soil cover and intermediate cover adequate. The facility maintains a daily operations log for the C&D Landfill including dates of soil cover. Reviewed the daily log for verification of weekly soil cover requirements.
- 64. Seeding for vegetative cover is to be conducted within next month on north and northeast facing slopes.
- 65. No on-site or off-site erosion noted.
- 66. The C&D Landfill receives approximately 20-50 tons of waste per day. The annual facility report for the period July 2010-June 2011 indicated 9,939.41 tons of waste disposed. During the month of July approximately 998.5 tons were disposed.
- 67. The C&D Landfill is approved for, and conducts recycling activities on site consisting of metals, clean wood, cardboard and other recyclables which are placed in proper containers at the end of each day.
- 68. Observed incoming loads, all incoming waste generated from construction and demolition operations during inspection period. No prohibited waste was noted in the C&D landfill.
- 69. Reviewed random inspection program and reviewed waste screening reports. There have been 9 random inspections conducted at the C&D Landfill during the period 07/06/11-08/22/11. Section 2.4.1 of the Operations Plan states a minimum of 1% or one per week of incoming loads are to be inspected. The number random inspections exceed 1% of incoming loads for the period.
- 70. Edge of waste markers are in place for the limits of waste on the C&D Landfill.
- 71. Reviewed semiannual monitoring program and last semiannual monitoring report for the C&D Landfill sampling event of March 16-17, 2011. Analysis results indicated iron and manganese exceeding the NCAC 2L ground water standards. The report indicates these constituents were naturally occurring and not indicative of impact from the landfill. No organic constituents are noted above 2L standards.
- 72. Monitoring wells were observed to be secure, accessible, and locked.
- 73. Windblown materials well controlled and collected.
- 74. The C&D landfill unit has a leachate sump system located in the northwest corner of the landfill. The system has not been accumulating leachate and has not required pumping in the past year. Reviewed leachate logs for the C&D landfill unit.

Household Hazardous Waste Facility

- 75. The facility was initially permitted to operate June 22, 2001.
- 76. Reviewed HHW facility permit, operations, and procedures.
- 77. The HHW facility is open to Davidson County citizens on Wednesdays by appointment, the first Saturday of each month, and by appointment for special considerations.

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78. Delivery and processing operations are in covered areas. An emergency drain and sump is located in the delivery area for potential spills.
79. Review of training records indicate Mike Lankford and Elly Barton have course completion certifications including Hazardous Waste Management issued by Environmental Resource Center, August 2005, Advanced Hazardous Waste Compliance for Generators issued by the Division of Waste Management, 2001, and HAZWOPER certifications including, yearly HAZWOPER annual updates.
80. Reviewed HHW facility operations plan (approved June 2011 revision), contingency plans, spill prevention plans, and brochures given to the public.
81. Reviewed HHW facility operational records including daily receiving logs, weekly staff inspection logs, weekly inventory logs, and shipping manifests.
82. Reviewed HHW acceptance, identification, packing, and storing procedures.
83. Collected HHW at the site is packaged in 55 gallon drums/labpacks and Gaylord boxes on site and transported by Shamrock Environmental Services to Resource Recovery and Reduction (3RC).
84. The most recent manifest for delivery to 3RC was August 4, 2011 containing 6,900 pounds.
85. The annual facility report indicated the facility collected 51,766 pounds of HHW during the reporting period July 1, 2010-June 30, 2011.
86. Excellent documentation and records maintenance.
87. The facility was observed to be clean and well maintained, with minimal inventory on site. The facility receives paints, poisons, flammable solvents, flammable solids, antifreeze, used oils, oxidizers, aerosols/compressed gas, acids, batteries, and other miscellaneous HHW waste.
88. The facility also accepts fluorescent lights, currently purchasing shipping boxes to ship collected lights to recyclers.
89. Collected used automotive oils are utilized in waste oil burners at the Davidson County.
90. Non-hazardous latex paints are solidified on site for disposal in the MSW landfill. Other non-hazardous residues are also sent to the MSW Landfill.
91. The facility does not accept explosives, infectious waste, or radioactive waste.

Other Facility Components

92. Observed operations at the small vehicle/resident waste disposal convenience and recycling area, tire collection site, household textiles recycling area, electronics recycling, white goods collection and processing facility, metal collection and swap shop area.
93. Observed operations at the material recovery facility. The picking line was in operation during the audit.
94. The material recovery facility processes items collected from the Davidson County recycling program and collected recyclables from Davidson County municipalities, as needed. Reviewed recent tonnage reports. The facility processes Plastics, Glass, Newspaper (ONP), Mixed paper (MPW), Cardboard (OCC), Office paper (OFP), Aluminum cans, and Steel cans.
95. In conjunction with other Davidson County recycling programs the county collects: used motor oil, antifreeze, lead acid batteries, rechargeable batteries, used oil filters, and vinyl siding.
96. Observed white goods collection and processing facility, and metals collection and processing areas. White goods brought in by county residents are processed at the site and have CFC's, motors, wiring, and other components removed before shipment to recyclers. The white goods facility processed 87.55 tons during the past 12 months.
97. Observed Electronics Recycling Area. Collected computers and televisions are sorted and shrink wrapped for shipment. The Electronics Recycling program has been included in the Davidson County 10-Year Plan and is eligible for distributions. The county also has plans to initiate mobile electronics collections. The county collected and processed 130.96 tons of electronics during the past year.
98. The county has plans to begin a Styrofoam collection and processing recycling program.

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99. Conducted a review of the County tire collection program.
100. The facility maintains a log of registered tire haulers and generators delivering tires to the site.
101. Tonnage totals for received tires are listed under commercial for the registered haulers/generators and separately for less than 5 tires brought in by county residents and county clean-ups. Incoming scrap tires are placed directly into trailers by scrap tire haulers, and monitored by scale house personnel.
102. Reviewed recently processed tire certification forms and found certification forms to be accurate and properly signed.
103. The facility received 155.65 tons of tires during the month of July 2011 and shipped 138.99 tons to the U.S. Tire facility.
104. Excellent documentation regarding registered tire haulers, generators, and tonnage reports. The scrap tire collection area was found to be well managed and operated.

Please contact me if you have any questions or concerns regarding this inspection report.



Phone: 336-771-5093

Environmental Senior Specialist
Regional Representative

Sent on: 8/26/11	X	Email		Hand delivery		US Mail		Certified No. <u> </u>
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Copies: Jason Watkins, District Supervisor
 Shawn McKee, Compliance Officer